## **Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims**

Claim 1 (Original) A compound of the formula I:

I

wherein:

R<sup>1</sup> is selected from the group consisting of:

- (1) hydrogen,
- (2) -C<sub>1-6</sub>alkyl, -C<sub>2-6</sub>alkenyl, -C<sub>2-6</sub>alkynyl, or -C<sub>3-8</sub>cycloalkyl which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
  - (a) halo,
  - (b) hydroxy,
  - (c) -O-C<sub>1</sub>-6alkyl,
  - (d) -C<sub>3</sub>-6cycloalkyl,
  - (e) phenyl or biphenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
    - (i)  $-C_{1}$ -6alkyl,
    - (ii) -C3-6cycloalkyl,
    - (iii) -O-C<sub>1-6</sub>alkyl,
    - (iv) halo,
    - (v) hydroxy,
    - (vi) -CF<sub>3</sub>,
    - (vii) -OCF<sub>3</sub>,
    - (viii) -NR9R10, and

Case No.: 21310YP Page No.: 5

- (ix) -CN,
- (f) -CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is independently selected from:
  - (i) hydrogen,
    - (ii) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-6 fluoro,
  - (iii) benzyl, and
  - (iv) phenyl,
- (g) -NR<sup>9</sup>R<sup>10</sup>, wherein R<sup>10</sup> is independently selected from:
  - (i) hydrogen,
    - (ii) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-6 fluoro,
  - (iii) benzyl, and
  - (iv) phenyl,
- (h)  $-CONR^9R^{10}$ ,
- (3) phenyl which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
  - (a) -C<sub>1</sub>-6alkyl,
  - (b) -C<sub>1-6</sub>alkyl-phenyl,
  - (c) -C<sub>3-6</sub>cycloalkyl,
  - (d) -O-C<sub>1-6</sub>alkyl,
  - (e) halo,
  - (f) hydroxy,
  - (g) -CF<sub>3</sub>,
  - (h)  $-OCF_3$ ,
  - (i)  $-NR^9R^{10}$ , and
  - (j) -CN;

R<sup>2</sup> is selected from the group consisting of:

- (1) hydrogen,
- (2)  $R^{4}-S(O)_{D}-$

wherein R<sup>4</sup> is independently selected from the group consisting of:

- (a) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-6 fluoro,
- (b) phenyl, and
- (c) benzyl,

and wherein p is independently 0, 1, or 2,

(3)  $R^{4}-S(O)_{p}N(R^{5})-$ ,

wherein R<sup>5</sup> is independently selected from the group consisting of:

(a) hydrogen,

- -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (b)
- phenyl, and (c)
- (d) benzyl,
- (4) -CN,
- -C<sub>1-6</sub>alkyl-CN, (5)
- (6) halogen,

(7)

wherein R<sup>8a</sup> and R<sup>8b</sup> are independently selected from the group consisting of:

- (a) hydrogen,
- (b) -CN,
- (c) halo,
- (d) -C<sub>1</sub>-6alkyl,
- -O-R<sup>5</sup>, (e)
- -S-R<sup>5</sup>, (f)
- - $CO_2R^5$ , and (g)
- (h) tetrazolyl,

(8)



wherein n is 1, 2, 3 or 4;

R<sup>3</sup> is selected from the group consisting of:

- -CH(OH)-R<sup>6</sup>, (1)
- (2) -C(O)R6,
- -CH(R6)-NR7R9, and (3)
- -C(O)-NR<sup>7</sup>R<sup>9</sup>; (4)

R6 is independently selected from the group consisting of:

- hydrogen (1)
- (2) C<sub>1-6</sub> alkyl,
- (3)

Case No.: 21310YP Page No.: 7

wherein Z is selected from the group consisting of -C(O)-, -CH(OH)-, and

and wherein q is 1 or 2;

R<sup>7</sup> is selected from the group consisting of:

- (1) hydrogen,
- (2) -C<sub>1-6</sub>alkyl, -C<sub>2-6</sub>alkenyl, -C<sub>2-6</sub>alkynyl, or -C<sub>3-8</sub>cycloalkyl which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
  - (a) halo,
  - (b) hydroxy,
  - (c) -O-C<sub>1-6</sub>alkyl,
  - (d) -C3-6cycloalkyl,
  - (e) phenyl or biphenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
    - (i) -C<sub>1-6</sub>alkyl,
    - (ii) -C<sub>3-6</sub>cycloalkyl,
    - (iii) -O-C<sub>1-6</sub>alkyl,
    - (iv) halo,
    - (v) hydroxy,
    - (vi)  $-CF_3$ ,
    - (vii) -OCF<sub>3</sub>,
    - (viii) -NR9R10, and
    - (ix) -CN,
  - (f)  $-CO_2R^9$ ,

Case No.: 21310YP

Page No.: 8

- (g)  $-NR^9R^{10}$ ,
- (h)  $-CONR^9R^{10}$ ,
- (3)  $-CHR^5-CONR^9R^{10}$ ,
- (4) phenyl which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
  - (a) -C<sub>1</sub>-6alkyl,
  - (b) -C<sub>1-6</sub>alkyl-phenyl,
  - (c) -C<sub>3</sub>-6cycloalkyl,
  - (d) -O-C<sub>1-6</sub>alkyl,
  - (e) halo,
  - (f) hydroxy,
  - (g)  $-CF_3$ ,
  - (h)  $-OCF_3$ ,
  - (i)  $-NR^9R^{10}$ , and
  - (j) -CN;

m is independently 1, 2, 3 or 4; and pharmaceutically acceptable salts thereof.

Claim 2 (Original) The compound of Claim 1 wherein R<sup>1</sup> is selected from the group consisting of:

- (1) hydrogen,
- (2) -C<sub>1-6</sub>alkyl, which is unsubstituted or substituted with 1-7 substituents where the substituents are independently selected from:
  - (a) halo,
  - (b) hydroxy,
  - (c) -O-C<sub>1-6</sub>alkyl,
  - (d) -C<sub>3</sub>-6cycloalkyl,
  - (e) phenyl or biphenyl, which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
    - (i) -C<sub>1</sub>-6alkyl,
    - (ii) -C3-6cycloalkyl,
    - (iii) -O-C<sub>1-6</sub>alkyl,
    - (iv) halo,
    - (v) hydroxy,
    - (vi)  $-CF_3$ ,

Case No.: 21310YP Page No.: 9

-OCF<sub>3</sub>,

- (vii)
- -NR9R10, and (viii)
- (ix) -CN,
- -CO<sub>2</sub>R<sup>9</sup>, wherein R<sup>9</sup> is independently selected from: (f)
  - (i) hydrogen,
    - -C1-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (ii)
  - (iii) benzyl, and
  - (iv) phenyl,
- -NR<sup>9</sup>R<sup>10</sup>, wherein R<sup>10</sup> is independently selected from: (g)
  - (i) hydrogen,
    - (ii) -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-6 fluoro,
  - (iii) benzyl, and
  - (iv) phenyl,
- -CONR9R10, (h)
- (3) phenyl which is unsubstituted or substituted with 1-5 substituents where the substituents are independently selected from:
  - (a) -C<sub>1</sub>-6alkyl,
  - (b) -C<sub>1</sub>-6alkyl-phenyl,
  - -C3-6cycloalkyl, (c)
  - (d) -O-C<sub>1-6</sub>alkyl,
  - (e) halo,
  - (f) hydroxy,
  - (g) -CF<sub>3</sub>,
  - (h) -OCF<sub>3</sub>,
  - -NR9R10, and (i)
  - (j) -CN.

Claim 3 (Original) The compound of Claim 1 wherein R1 is selected from the group consisting

(1) hydrogen,

of:

- (2) methyl,
- (3) isopropyl,
- (4) isobutyl, and
- (5) phenyl.

Case No.: 21310YP Page No.: 10

Claim 4 (Original) The compound of Claim 1 wherein R<sup>2</sup> is:  $R^4-S(O)_2N(R^5)$ -,

wherein R4 is independently selected from the group consisting of:

- -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (a)
- (b) phenyl, and
- benzyl, (c)

and wherein R<sup>5</sup> is independently selected from the group consisting of:

- (a) hydrogen,
- -C<sub>1</sub>-6alkyl, which is unsubstituted or substituted with 1-6 fluoro, (b)
- phenyl, and (c)
- (d) benzyl.

Claim 5 (Original) The compound of Claim 1 wherein R<sup>2</sup> is CH3-S(O)2N(CH3)-.

Claim 6 (Original) The compound of Claim 1 wherein R<sup>3</sup> is selected from the group consisting of:

- (1) -CH(OH)-R<sup>6</sup>,
- (2)  $-C(O)R^6$ , and
- -CH(R6)-NR7R9. (3)

Claim 7 (Original) The compound of Claim 1 wherein R6 is:

and wherein n is 2 or 3, and R<sup>5</sup> is hydrogen or methyl.

Claim 8 (Original) The compound of Claim 1 wherein R6 is:

wherein R<sup>5</sup> is hydrogen or methyl, and Z is selected from the group consisting of

Case No.: 21310YP Page No.: 11

-C(O)-, -CH(OH)-, and

Claim 9 (Original) The compound of Claim 1 wherein  $\mathbb{R}^3$  is selected from the group consisting of:

- (1) -CH2-OH, and
- (2) -CH<sub>2</sub>-NH-CH(CH<sub>2</sub>CH<sub>3</sub>)-CO-NH-CH<sub>2</sub>CH(CH<sub>3</sub>)<sub>2</sub>.

Claim 10 (Original) The compound of Claim 1 wherein m is 1.

Claim 11 (Original) The compound of Claim 1 wherein m is 2.

Claim 12 (Original) A compound which is selected from the group consisting of:

Int'l Appl'n No.: PCT/US2004/000085 Case No.: 21310YP Page No.: 12

Case No.: 21310YP Page No.: 13

and pharmaceutically acceptable salts thereof.

Claim 13 (Original) A pharmaceutical composition comprising an effective amount of a compound of Claim 1 and a pharmaceutically acceptable carrier.

Claim 14 (Original) A method for inhibition of  $\beta$ -secretase activity in a mammal in need thereof which comprises administering to the mammal a therapeutically effective amount of a compound of Claim 1.

Int'l Appl'n No.: PCT/US2004/000085 Case No.: 21310YP Page No.: 14

Claim 15 (Original) A method for treating, preventing, controlling, ameliorating or reducing the risk of Alzheimers disease in a patient in need thereof comprising administering to the patient an effective amount of a compound of Claim 1.